Prior to the establishment of the Federal Reserve, America's money supply was controlled by the First Bank of the United States, established in 1791 and then later the Second Bank of the United States, established in 1816. The First Bank of the United States was established by Congress at the request of Treasury Secretary Alexander Hamilton and was the largest corporation in the country, but largely opposed by rural Americans who were uncomfortable with such a powerful entity. When the bank's charter expired in 1811 (after 20 years), Congress voted against a new one. In 1816, however, politicians developed renewed fervor for the creation of a central bank, and this is when Congress decided to charter the Second Bank of the United States. But when Andrew Jackson became President in 1828, he vowed to destroy it. He appealed to populist sentiments by criticizing the bank's banker-controlled power, and by 1836, when the bank's charter expired, Congress refused to renew it. Andrew Jackson would manage to pay off all of America's interest bearing debt by selling off government-owned land, but left the country without a uniform national currency. After the Second National Bank expired, the nation's money supply consisted of private bank notes issued by state-charted banks, and were redeemable for gold or silver. Such form of currency system was highly chaotic and by the 1860s, there were 8000 different private bank notes circulating in the US. In some cases, banks would not accept notes issued by banks unknown to them. Ultimately, the rising volume of check transactions led to the creation of the New York Clearinghouse Association in 1853, which allowed banks to exchange checks and settle accounts. These banks also offered demand deposits, which are simply bank deposits that can be withdrawn at any time without advanced notice.

During the American Civil War, the National Banking Act of 1863 was passed. This established nationally chartered banks which issued notes backed by government-owned securities, and also provided the country with a national currency, allowing the government to finance the Union Army during the American Civil War. These paper notes were called greenbacks because of the green print on the back, and were printed in two forms: Demand Notes and United States Notes. In July of 1861, Congress authorized the printing of 50,000,000

in Demand Notes for the purpose of financing the Civil War. These notes could be redeemed for gold or specie; specie is money in the form of coin. The United States Notes, on the other hand, were not backed by anything, but considered equivalent to the Demand Notes. Because of the threat of a severe debt crisis, Congress was urged to pass the "Legal Tender Act" in 1862 which authorized the printing of 150,000,000 in United States Notes. Meanwhile, the Demand Notes were gradually taken out of circulation by mid-1863. The value of the United States Note in relation to gold would fluctuate until after the Civil War when it rose to become on par with gold. When this happened, the United States Notes became convertible into gold. Yet despite the currency stability provided by the National Banking Act of 1863, bank runs and financial panics continued to negatively affect the economy. In 1893, a banking panic triggered a devastating depression in which 575 banks failed or suspended their operations. It was common for banks to suspend operations in order to avoid becoming insolvent by having to liquidate their assets in order to meet the withdrawal demands of depositors. Subsequently, the economy didn't stabilize until J.P. Morgan intervened. In 1907, another bank panic led to growing demands for banking reforms. Thus, a consensus for central banking authority and elastic currency grew amongst most Americans. The Aldrich-Vreeland Act was passed in 1908 in response to the panic of 1907 and provided emergency currency issuance during financial crises. It also created the national Monetary Commission to research solutions to the nation's banking problems. The commission developed a banker-controlled plan, but this was largely contested by progressives who wanted a bank under public control, not banker control. However, the election of Woodrow Wilson for President would set the stage for a decentralized central bank, as he would sign the Federal Reserve Act into law in late 1913.

The trade-off that followed the establishment of the Federal Reserve was the rise of inflation. Before the Federal Reserve System, the US economy was more deflationary. In the 1800s, deflation occurred between 1817 and 1860 & between 1865 and 1900. From 1800 to 1940, the cost of living had risen on average only 0.2% a year. It actually declined on 69 occasions. The average annual inflation between 1790 and 1914 was only 0.4%. In contrast, the average annual

inflation between 1914 and 2021 was 3.24%. After 1913, deflation was rare, only occurring between 1930 – 1933 and between 2007-2009. The rise of inflation after 1913 can be attributed to both the elimination of the gold standard and the monetary operations of the Federal Reserve.

The rise of inflation has reignited debate on whether or not the Federal Reserve should remain. While the Federal Reserve has certainly been instrumental in reducing significantly the prospect of bank runs, they have nevertheless come under intense scrutiny regarding their ability to curtail inflation. The Federal Reserve runs the printing press for dollar bills. They don't print the actual paper currency, but they determine how much is to be printed each year. The actual job of printing paper currency belongs to the Treasury Department Bureau of Engraving and Printing(BEP). (Coins are produced by the U.S. Mint). Basically, the Federal Reserve submits an order to the BEP, who then prints the money and sends it to the Federal Reserve. The Federal Reserve then distributes it to its 28 cash offices, who in turn distribute the money to 8400 banks and credit unions across the country. Those banks and credit unions hold the money as reserves, and the amount they are to lend out is determined by the Federal Reserve Board of Governors, which is comprised of 7 members, all nominated by the President and confirmed by the Senate. The 7 members of the Federal Reserve Board of Governors all serve on the Federal Open Market Committee. All except the Chair and Vice Chair serve 14 year terms. The Chair and Vice Chair only serve 4 year terms. For the 2020 fiscal year, the Federal Reserve ordered 5.2 billion US currency notes valued at 146 billion. So when economic discourse mentions the Fed printing money, this is what they mean. These days, the American money supply is digitally credited or debited to the major banks, and it is not until after the banks loan this money out to the public that the money gets printed. The amount determined to be printed is discussed among the Federal Open Market Committee(FOMC) and its associated economic advisers. The FOMC is a committee within the Federal Reserve and is their monetary policy making body. They have 8 regularly scheduled meetings throughout the year where they discuss monetary policy, interest rates, and economic conditions. The Fed

raises interest rates by influencing the Federal Funds rate, which are the reserves held by banks at one of the 12 regional Federal Reserve banks. At the meetings of the FOMC, the Federal Reserve sets a target for the Federal Funds rate, which defines the interest rate at which commercial banks borrow and lend their excess reserves to each other. The Federal Reserve gets banks to raise or lower their interest rates by either increasing the amount required to be held in reserve or reducing the amount required. When the Federal Reserve increases the amount required to be held in reserve, banks become limited in the amount they can lend out. When the Fed decreases the amount required to be held in reserve, the banks can then lend out more. The Federal Reserve can also influence interest rates by changing the interest rate the Federal Reserve bank pays on reserve balances. This sets an upper limit on the fed funds rate since banks will never opt to borrow from another bank at a higher interest rate than what they would get if they simply borrow directly from the Federal Reserve bank. When the economy does not respond to interest rate cuts, the Federal Reserve turns to Quantitative Easing(QE) through its Open Market Operations in order to help stimulate the economy. They began buying up Government Debt and Mortgage backed securities, reducing the supply of these in the market. By purchasing Mortgage backed securities, the Federal Reserve stabilizes the real estate industry, preventing job losses and increasing investor willingness to buy new mortgages. When the Federal Reserve buys US treasury securities, it raises the money supply and increases the volume of bank reserves. Reducing the pace of these QE activities is called tapering. Tapering can slowdown the economy without a corresponding interest rate hike of short term loans.

The rise of dollar printing became ignited when in 1971, the US pulled out of the Bretton Woods accord where the US dollar was pegged to the price of gold at 35 dollars an ounce, with all other currencies pegged to the dollar. The dollar had been freely exchangeable into gold, but when the US pulled out of the accord in 1971, convertibility into gold was no longer tenable since America's stores of gold had depleted over time. Thus the dollar became a fiat currency backed by nothing, that is, until the Petrodollar Agreement

was established by President Richard Nixon and Secretary of State Henry Kissinger in 1973, as the collapse of the gold standard triggered a worldwide bear market. The basic gist of the agreement was that the US would agree to defend Saudi Arabia militarily in return for all oil becoming denominated in US Dollars. Another option of this arrangement would be the purchase of US Treasury Securities with the extra profits from oil sales. Shortly thereafter, an accordance was established in 1975, as Saudi Arabia and all OPEC nations would agree to sell their oil for US Dollars and also hold their oil proceeds in US Treasury securities. The US would in exchange agree to provide military support and security. The result was that the US dollar became the world's reserve currency since much of the world's energy exchange had be transacted with US Dollars. This exponentially increased global demand for US Dollars since all foreign governments that relied on oil imports from the middle east had to hold U.S. Dollars in order to purchase it. Essentially the US Dollar had simply transitioned from the gold standard to the oil standard. And this increased demand for U.S Dollars gave the US more leg room to print higher amounts of money before dangerous levels of inflation could ever set in. The main points of the agreement: The Saudis would sell their oil in US Dollars only and invest the surplus profits in US Treasury securities, while the US would agree to assure Saudi Arabia's security with military support.

The standard outlook of intervention is that when inflation is high, the Federal Reserve can normally raise interest rates to slow down the economy. When inflation is low, the Federal Reserve can typically lower rates to speed up the economy. An example of this being applied in real time is when Paul Volcker, the twelfth Chairman of the Board of Governors of the Federal Reserve System, raised interest rates significantly in 1980 in order to bring the down the Great Inflation that occurred throughout the decade of the 1970s. It is likely that the Great Inflation had come about both as a result of the collapse of Bretton Woods system and as a result of the PetroDollar agreement established in 1973, allowing the US to print more cash due to the higher global demand for U.S. Dollars but without any real way to account for the monetary aggregates that are responsible for the financial stability of a nation's monetary system. Money

circulation in relation to money held in reserve was hard to keep track of throughout much of the 1970s, but Paul Volker insisted that the FOMC focus on strategies to deal with the growth of monetary aggregates in order to help bring down inflation. Volker would thus raise interest rates to 20% in March of 1980, before lowering it in June. As inflation subsequently rose again, Volcker hiked interest rates back to 20% in December of 1980 and left it above 16% until of May of 1981. Known as the Volcker Shock, this strategy worked and ended the Great Inflation. While this is a simple methodology, it does not eliminate every cause for inflation. While the Federal Reserve can increase or decrease the money supply by raising or lowering the reserve requirements for banks, they still have no control over the price setting by producers of goods and services. Those who sell goods and services can raise prices in response to money tightening implementations and in such a manner that would force policy makers to increase the money supply, further driving inflation. After the 2008 financial crisis, in which the Federal Reserve pumped billions of dollars into investment firms that were on the verge of collapse, the notion of economics took on a considerable change, where money supply became defined in terms of both the amount of it in circulation and the amount of it that could be printed. This is a revolting prospect because now dealers may be less perturbed by fiscal policies aimed at tightening the money supply and reducing inflation. This in itself conjures a reality in which inflation becomes hyperinflation and reaches a point where it will not respond to monetary policy implementations, seeing that in light of the PetroDollar agreement of 1973, producers would insist that the US Treasury Department print more money to keep up with the price of goods. This level of hyperinflation could only be resolved by an overhaul of the current system. Re-institution of the gold standard thus becomes the only solution to curbing inflation. Unless, the Federal Reserve can prove to the economy that simply printing more money is not feasible, even with a backdrop of continuous global demand. This would require another 2008-like financial crisis scenario where firms would be allowed to collapse, as opposed to receiving large sums of bailout funds. The result is the dollar

becomes perceived to have more value and as a consequence, inflation comes under control.

The United States had lived up to their agreement with OPEC, when in 1989, tension arose between Iraq and Kuwait. Both of these nations are original OPEC member countries, but Iraq accused Kuwait of producing more oil than which was required by the OPEC quota at the time, causing oil prices to drop, which in turn was hurting Iraq's economy and their ability to pay off debts accrued during the Iran-Iraq war from 1980-1988. Iraqi President Saddam Hussein had also accused Kuwait of slant drilling into Iraq's Rumalia oil field, which compelled Saddam to declare war and embark upon an invasion of the country. Iraq's conquest of Kuwait led to the 1991 Gulf War in which a coalition led by the United States intervened and repelled the Iraqi forces from Kuwait, and from further advancing into Saudi Arabia, which was the main concern for the US since Saudi Arabia exports 15% of the world's crude oil reserves—the highest of any nation. There was fear that after Iraq's occupation of Kuwait, Saddam would target Saudi Arabia's oil fields. This defense of Saudi Arabia was main point of the 1973 PetroDollar agreement—Saudi Arabia sell oil for USD and in return the US protect them militarily. However, after the year 2000, a number of OPEC nations decided to stop selling their oil for US Dollars. Iraq switched to selling their oil for Euros in the early 2000s. Shortly thereafter, the US invaded Iraq in 2003 without pretext. In 2011, Libya threatened to sell their oil for gold, before Qaddafi, Libya's President at that time, would be ousted and killed via a US-backed coup. In 2012, Iran stopped trading their oil for US dollars, and in 2018, Venezuela followed suit and also decided to stop selling their oil for US Dollars. Both nations were slapped with devastating sanctions that ultimately crippled their economies. Saudi Arabia is now the last line of defense for US Dollar hegemony and the economic expansion that followed the elimination of the gold standard. But in recent years, the United States has been enveloped within a long-standing disastrous foreign policy approach which had no qualms about giving assurances to militant forces or separatist movements in foreign countries, before abandoning them to the mercy of defeat, which oftentimes devastated the entire country. Such was the case in Vietnam, Syria, and Libya. And now

NATO expansion eastward at the behest of the US for the sake of provoking Russia, along with the US's unkept assurances to Ukraine amid a massive a Russian invasion of the country has given way to a growing lack of trust in US foreign policy. This will eventually come to a head with regards to US/Saudi relations, which is a critical alliance with systemic implications for the US.

And as of 2021, relations between Saudi Arabia and the United States have become strained. Washington D.C. has opted to take a hardline stance against the Saudi Crown Prince and threatened to prosecute him over the killing of Jamal Khashoggi, a Saudi-American journalist who was threatening to reveal damning information about Saudi Arabia's war crimes in Yemen. The US President had also vowed to cut US involvement in Yemen, and at the same time continue to ignore the Yemen issue in nuclear talks with Iran. Yemen is a central issue for Saudi Arabia's security due to the fact that the Iran-backed Houthi militant group has used drones supplied to them by Iran to attack Saudi oil facilities. The US's backstep on these issues could lead to Saudi Arabia cutting ties with the US, and refusing to sell their oil for US Dollars. If this is the beginning of a strong rift between the US and Saudi Arabia, it will have an enormous negative impact on the US economy. This is also something that could send gold through the roof. Saudi Arabia has so much clout that it was once classified how Saudi Arabia was abusing their position with the US, helping Saudis accused of crimes in the US evade the US Judicial process by extraditing them back to Saudi Arabia. These crimes included manslaughter, child pornography, and rape. Many don't realize that if Saudi doesn't sell their oil for US Dollars, there would be no global demand for US dollars, and hence there would be no way the US treasury could continue to print the infinite amounts of currency they are currently printing. This current discord is a direct result of Washington D.C.'s combative foreign policy stance since the 2020 US presidential election. The US-Saudi alliance is a critical alliance and the US may need to hope that the Saudis are not planning to look elsewhere for military assurances. Especially with Germany now both re-militarizing in response to the Russian invasion of Ukraine, and also seeking alternative sources of oil... now that Germany's dependence on oil from Russia may be unsustainable as Russia

becomes isolated from the international community. With Germany's economic situation at stake, they may look to compete with the US for mid-east influence by using diplomatic backchannels to set up oil deals that could be favorable for the Euro and the German economy, and of which would undercut US interests and their economic security. Now that the increased production of arms and innovation could provide Germany with tremendous bargaining power, Saudi Arabia may be tempted to seek out more assertive military assurances from other nations besides the US. As Germany becomes further alienated from Russia diplomatically, it may correspond to a much easier decision on their part to agree to defend Saudi Arabia militarily, and that would include getting involved in the Yemen Crisis. Russia in recent years has tried to expand their influence in the middle east, but their ties to an allied consortium of Shiite nations like Iran and Syria made it impossible for Russia to provide Saudi Arabia with the security guarantees that it needs, if such was in fact on their agenda. The most Russia could offer in their attempt to branch out diplomatically from this consortium was allowing Israel to have unfettered access to Syrian airspace, so that Israel could conduct airstrikes on Iran bases in Syria, bases which are used to channel arms and other supplies to Iranian proxies in Yemen, Lebanon, and the Gaza Strip. These diplomatic limitations for Russia leaves Germany as the next best option for Saudi Arabia's security.

Because of this possibility, the Federal Reserve must prepare in advance a contingency plan for US Dollar collapse. Because as of now, there are 4 major factors that support the idea of such a scenario arising in the near future. 1. German military buildup and isolation from Russia and their need to secure energy imports and deals from the middle east to make up for the economic fall back. 2. Reckless rhetoric towards Saudi officials by the current US administration 3. The Federal Reserve's slow response to rising inflation. 4. The world's slow transition to alternative sources of energy.

Sources: https://www.sandstoneam.com/insight/rise-of-the-petrodollar THE U.S. DOLLAR'S ROLE AS THE WORLD'S RESERVE CURRENCY WAS FIRST ESTABLISHED IN 1944 WITH THE BRETTON WOODS AGREEMENT

Kevin L. Kliesen and David C. Wheelock, "Managing a New Policy Framework: Paul Volcker, the St. Louis Fed, and the 1979-82 War on Inflation," Federal Reserve Bank of St. Louis Review, First Quarter 2021, pp. 71-97. https://doi.org/10.20955/r.103.71-97

Wikipedia contributors. (2021, September 10). 1973–1974 stock market crash. In Wikipedia, The Free Encyclopedia. Retrieved 21:19, March 10, 2022, from https://en.wikipedia.org/w/index.php?title=1973%E2%80%931974_stock_market_crash&oldid=1043567392

Wikipedia contributors. (2022, March 8). Gulf War. In Wikipedia, The Free Encyclopedia. Retrieved 21:20, March 10, 2022, from https://en.wikipedia.org/w/index.php?title=Gulf_War&oldid=1075986328

“The Mars Hypothesis” by Anthony of Boston